



# STIC EIC 2100 Search Request Form

143  
107074

Today's Date:

10/29/03

What date would you like to use to limit the search?

Priority Date: 12/22/00 Other:

Name THU HA NGUYEN

AU 2155 Examiner # 77580

Room # CPL 2.5A08 Phone 305-7447

Serial # 09/746,677

Format for Search Results (Circle One):

PAPER DISK EMAIL

Where have you searched so far?

USP DWPI EPO JPO ACM IBM TDB

IEEE INSPEC SPI Other \_\_\_\_\_

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

- Dividing a set of target devices, into a number of subset of target devices, based on an ID of the device and the number of subsets of target devices.
- Broadcast messages to different subgroup at different times to manage network traffic.
- Receiving one or more reply messages from target devices
- Estimating a number of ~~ter~~ devices coupled to network.
- Determining a number of subgroup based on the estimated number of devices coupled to network.

**BEST AVAILABLE COPY**

STIC Searcher

David Holloway

Phone

308-7794

Date picked up

10-30-03

Date Completed

10-30-03



DTALOG 48 min

#429 22/10

Set	Items	Description
S1	1928591	BROADCAST? OR NARROWCAST? OR MULTICAST? OR (BROAD OR NARROW OR MULTI) ( ) (CAST?) OR TRANSMIT? OR TRANSMIS?
S2	204284	(RESOURCE? OR BANDWIDTH? OR TRAFFIC) (2N) (MANAGE? OR CONTROL? OR ALLOCAT? OR ROUTING)
S3	2571360	POLL OR POLLING OR POLLS OR PING? ? OR ACKNOWLEDGE? OR ACK? ? OR REPLY OR RESPONSE?
S4	127396	SUBGROUP? OR SUBDIVID? OR (SPLIT? OR DIVIDE?) (N) (LIST? OR - GROUP? OR SET? ?)
S5	2205	S4 (3N) (COUNTING? OR NUMBER? OR COUNT? OR QUANTIT? OR SIZE? OR AMOUNT?)
S6	5423	(PC OR PCS OR DEVICE? OR COMPUTER? OR NODE? OR WORKSTATION? OR WORK( ) STATION?) (2N) (SERIAL( ) NUMBER? OR ID OR IDENTIFIER? OR ADDRESS?)
S7	9847	S2 AND (DIVID? OR SPLIT? OR SUBDIVID? OR DIVISION? OR SUBDIVIS? OR BREAKUP? OR SUBGROUP?)
S8	57865	S2 AND (NETWORK? OR LAN OR LANS OR WAN OR WANS OR INTERNET? OR INTRANET?)
S9	839	S1 AND S2 AND S3
S10	28	S1 AND S2 AND S6
S11	3	S1 AND S2 AND S5
S12	100	S9 AND (S4 OR S7)
S13	72	S12 AND S8
S14	103	S13 OR S11 OR S10
S15	74	RD (unique items)
S16	55	S15 NOT PY>2000
S17	55	S16 NOT PD>20001222
File	8: Ei Compendex(R)	1970-2003/Oct W3 (c) 2003 Elsevier Eng. Info. Inc.
File	35: Dissertation Abs Online	1861-2003/Sep (c) 2003 ProQuest Info&Learning
File	65: Inside Conferences	1993-2003/Oct W4 (c) 2003 BLDSC all rts. reserv.
File	2: INSPEC	1969-2003/Oct W3 (c) 2003 Institution of Electrical Engineers
File	94: JICST-EPlus	1985-2003/Oct W4 (c) 2003 Japan Science and Tech Corp(JST)
File	111: TGG Natl. Newspaper Index(SM)	1979-2003/Oct 27 (c) 2003 The Gale Group
File	233: Internet & Personal Comp. Abs.	1981-2003/Jul (c) 2003, EBSCO Pub.
File	144: Pascal	1973-2003/Oct W3 (c) 2003 INIST/CNRS
File	34: SciSearch(R) Cited Ref Sci	1990-2003/Oct W3 (c) 2003 Inst for Sci Info
File	99: Wilson Appl. Sci & Tech Abs	1983-2003/Sep (c) 2003 The HW Wilson Co.
File	95: TEME-Technology & Management	1989-2003/Oct W2 (c) 2003 FIZ TECHNIK

17/5/3 (Item 3 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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05664378 E.I. No: EIP00095339719

**Title: Fast arbitration scheme for terabit packet switches**

Author: Chao, H. Jonathan; Lam, Cheuk H.; Guo, Xiaolei

Corporate Source: Polytechnic Univ, NY, USA

Conference Title: 1999 IEEE Global Telecommunication Conference - GLOBECOM'99

Conference Location: Rio de Janeiro, Braz Conference Date: 19991205-19991209

Sponsor: IEEE

E.I. Conference No.: 57336

Source: Conference Record / IEEE Global Telecommunications Conference v 2 1999. IEEE, Piscataway, NJ, USA, 99CB37042. p 1236-1243

Publication Year: 1999

CODEN: CRIEET

Language: English

Document Type: CA; (Conference Article) Treatment: G; (General Review)

Journal Announcement: 0011W2

Abstract: Input-output queued switches have been widely considered as the most feasible solution for large capacity packet switches and IP routers. The challenge is to develop a high speed and cost-effective arbitration scheme to maximize the switch throughput and delay performance for supporting multimedia services with various quality-of-service (QoS) requirements. In this paper, we propose a **ping**-pong arbitration (PPA) scheme for output contention resolution in input-output queued switches. The basic idea is to **divide** the inputs into groups and apply arbitration recursively. Our recursive arbiter is hierarchically structured, consisting of multiple small-size arbiters at each layer. The arbitration time of an n-input switch is proportional to  $\log_2 n$  when we group every two inputs or every two input groups at each layer. We present a 256 multiplied by 256 terabit crossbar **multicast** packet switch using the PPA. The design shows that our scheme can reduce the arbitration time of the 256 multiplied by 256 switch to 11 gates delay, demonstrating the arbitration is no longer the bottleneck limiting the switch capacity. (Author abstract) 12 Refs.

Descriptors: Packet **networks** ; Queueing **networks** ; **Multicasting** ; Recursive functions; Hierarchical systems; Congestion **control** (communication); Telecommunication **traffic**

Identifiers: **Ping**-pong arbitration (PPA) scheme

Classification Codes:

721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory)

716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software);

717 (Electro-Optical Communications); 718 (Telephone & Line Communications); 721 (Computer Circuits & Logic Elements)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

'17/5/5 . (Item 5 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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05547080 E.I. No: EIP00045154881

**Title: On the use of destination set grouping to improve inter-receiver fairness for multicast ABR sessions**

Author: Jiang, Tianji; Ammar, Mostafa; Zegura, Ellen W.

Corporate Source: Georgia Inst of Technology, Atlanta, GA, USA

Conference Title: 19th Annual Joint Conference of the IEEE Computer and Communications Societies - IEEE INFOCOM2000: 'Reaching the Promised Land of Communications'

Conference Location: Tel Aviv, Isr Conference Date: 19000326-19000330

Sponsor: IEEE

E.I. Conference No.: 56703

Source: Proceedings - IEEE INFOCOM v 1 2000. IEEE, Piscataway, NJ, USA. p 42-51

Publication Year: 2000

CODEN: PINFEZ ISSN: 0743-166X

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 0006W3

**Abstract:** **Multicast** applications can involve a large number of receivers with heterogeneous data reception capabilities. In a traditional single-rate **multicast** session, the **transmission** rate at the source is chosen to match the lowest capacity path to a receiver in the session. This can cause an under-utilization of higher capacity paths to other receivers. We have previously defined an inter-receiver fairness measure in order to quantify the effect of this underutilization. We also developed protocols that use this measure to guide the choice of the source rate for a single-rate session. In this paper we design and develop a multi-rate protocol in the context of an ATM ABR service to achieve better inter-receiver fairness for a **multicast** session. The multi-rate protocol we investigate is based on the use of destination set grouping (DSG) where the set of receivers in a **multicast** session is partitioned into disjoint subgroups. The **transmitter** carries a separate conversation with each **subgroup**. Based on a **number** of grouping heuristics, the DSG protocol attempts to find the partitioning of the receivers that maximizes the inter-receiver fairness of the session. The DSG protocol can result in a session receiving a higher **bandwidth allocation** when it is split into multiple connections. We address this issue by proposing a mechanism in which the connections split from a single **multicast** session are treated as a single aggregated-allocation connection (AAC). A set of examples demonstrate the effectiveness of the DSG scheme incorporating the AAC technique on improving inter-receiver fairness for **multicast** ABR sessions. (Author abstract) 13 Refs.

**Descriptors:** Asynchronous transfer mode; Congestion control (communication); Network protocols; Signal receivers; **Multicasting**; Bandwidth

**Identifiers:** Available bit rate (ABR); Destination set grouping; Inter-receiver fairness

**Classification Codes:**

716.1 (Information & Communication Theory)

716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical Communications); 718 (Telephone & Line Communications); 723 (Computer Software)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

17/5/6 . (Item 6 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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05547027 E.I. No: EIP00045154828

**Title: Collision avoidance and resolution multiple access for multichannel wireless networks**

Author: Garces, Rodrigo; Garcia-Luna-Aceves, J.J.

Corporate Source: Metricom Inc, Los Gatos, CA, USA

Conference Title: 19th Annual Joint Conference of the IEEE Computer and Communications Societies - IEEE INFOCOM2000: 'Reaching the Promised Land of Communications'

Conference Location: Tel Aviv, Isr Conference Date: 19000326-19000330

Sponsor: IEEE

E.I. Conference No.: 56703

Source: Proceedings - IEEE INFOCOM v 2 2000. IEEE, Piscataway, NJ, USA. p 595-602

Publication Year: 2000

CODEN: PINFEZ ISSN: 0743-166X

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 0006W3

Abstract: We introduce and analyze CARMA-MC (for Collision Avoidance and Resolution Multiple Access for Multiple Channels), a new stable channel access protocol for multihop wireless networks with multiple channels. CARMA-MC relies on the assignment of a unique channel and a unique **identifier** to each **node** to support correct deterministic collision resolution in the presence of hidden terminals. CARMA-MC dynamically divides the channel of each node into cycles of variable length; each cycle consists of one or more receiving periods and a **transmission** period. During the receiving period, stations with one or more packets to send compete for the right to acquire the floor of a particular receiver's channel using a deterministic tree-splitting algorithm. Each receiving period consists of collision resolution steps. A single round of collision resolution (i.e., a success, and idle or a collision of control packets) is allowed in each contention step. The receiving period is initiated by the receiver and takes place in the channel assigned to the receiver station. The channel utilization and packet delays are studied analytically and by simulation. (Author abstract) 22 Refs.

Descriptors: Wireless telecommunication systems; Network protocols; Telecommunication **traffic**; Congestion **control** (communication); Communication channels (information theory); Algorithms

Identifiers: Channel access protocol

Classification Codes:

716.1 (Information & Communication Theory)

716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical Communications); 723 (Computer Software); 718 (Telephone & Line Communications); 921 (Applied Mathematics)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

17/5/8 (Item 8 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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05346312 E.I. No: EIP99084759768

**Title: Fairness enhancement in wireless data multiplexing by packet segmentation**

Author: Morera, R.; Dunlop, J.

Corporate Source: Univ of Strathclyde, Glasgow, UK

Conference Title: Proceedings of the 1999 IEEE 49th Vehicular Technology Conference - Moving into a New Millenium

Conference Location: Houston, TX, USA Conference Date: 19990516-19990520

E.I. Conference No.: 55322

Source: IEEE Vehicular Technology Conference v 1 1999. p 748-752

Publication Year: 1999

CODEN: IVTCDZ ISSN: 0740-0551

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 9910W1

**Abstract:** An algorithm combining packet segmentation and a **polling** scheme for data scheduling to overcome unfairness in a mobile radio TDMA system is proposed. The algorithm outperforms a first-in/first-out scheme in access delay, **transmission** delay and fairness. Nevertheless, for a low load in the system, FIFO performance is slightly better for the normalized **transmission** delay. 11 Refs.

**Descriptors:** Cellular radio systems; Time **division** multiple access; Wireless telecommunication systems; Data communication systems; Packet **networks** ; Multiplexing; Congestion **control** (communication); Telecommunication **traffic** ; Algorithms

**Identifiers:** Wireless data multiplexing; Packet segmentation; Fairness; **Transmission** delay; Access delay

**Classification Codes:**

716.3 (Radio Systems & Equipment)

716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software); 921 (Applied Mathematics)

71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

17/5/40 (Item 2 from file: 144)  
DIALOG(R)File 144:Pascal  
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14906166 PASCAL No.: 01-0054987  
**POSTMAN: Polling -based scheduling strategy for multiple access control  
in wireless ATM networks**

TANG R; NIU Z

Tsinghua Univ, Beijing, China

Journal: IEICE Transactions on Communications, 1999, v E82-B (9)

1514-1521

ISSN: 0916-8516 CODEN: ITRCEC Availability: INIST-XXXX

No. of Refs.: 16 Refs.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: Japan

Language: English

In this paper, we propose a **polling** -based scheduling strategy for multiple access control in wireless ATM **networks** (POSTMAN). A pure centrally controlled **polling** scheme is adopted in our protocol, therefore no contention channel is needed. The POSTMAN protocol assumes a TDMA/TDD frame format, by which wireless **bandwidth** is **allocated** flexibly both among multiple mobile terminals and between downlink and uplink channels. When **polling** the uplink traffic, the POSTMAN needs no priori traffic model to predict the cell arrivals. Instead, a token queue and an ABR buffer status table are used in the base station. Simulation results show that the POSTMAN protocol is robust in most cases and can work steadily under very high **network** load conditions.

English Descriptors: Multiple access control (MAC); Available bit rate (ABR); **Polling** scheduling strategy; Theory; Wireless telecommunication systems; Time **division** multiple access; Bandwidth; Telecommunication traffic; Radio links; Cellular radio systems; Mathematical models; Computer simulation; Congestion control (communication); Communication channels (information theory); Asynchronous transfer mode

French Descriptors: Theorie; Systeme telecommunication sans fil; Acces multiplexage temps; Largeur bande; Teletrafic; Faisceau hertzien; Systeme cellulaire radio; Modele mathematique; Simulation ordinateur; Gestion encombrement (communication); Canal **transmission** ; **Transmission** asynchrone

Classification Codes: 001D04B; 001D04A; 001D04B04; 001A02; 001D02B12

Set	Items	Description
S1	79821	BROADCAST? OR NARROWCAST? OR MULTICAST? OR (BROAD OR NARROW OR MULTI) () (CAST?)
S2	16202	(RESOURCE? OR BANDWIDTH? OR TRAFFIC) (2N) (MANAGE? OR CONTROL? OR ALLOCAT? OR ROUTING)
S3	429645	PING? ? OR ACKNOWLEDGE? OR ACK? ? OR REPLY OR RESPONSE?
S4	13534	SUBGROUP? OR SUBDIVID? OR (SPLIT? OR DIVIDE?) (N) (LIST? OR - GROUP? OR SET? ?)
S5	824	S4 (3N) (COUNTING? OR NUMBER? OR COUNT? OR QUANTIT? OR SIZE? OR AMOUNT?)
S6	16713	(PC OR PCS OR DEVICE? OR COMPUTER? OR NODE? OR WORKSTATION? OR WORK() STATION?) (2N) (SERIAL() NUMBER? OR ID OR IDENTIFIER? - OR ADDRESS?)
S7	1309523	S1 OR TRANSMIT OR TRANSMISSION
S8	26	S2 AND S7 AND S6
S9	0	S8 AND S5
S10	0	S8 AND S4
S11	470	S7 AND S2 AND S3
S12	0	S11 AND S5
S13	0	S11 AND S4
S14	1	S7 AND S2 AND S5
S15	7	S7 AND S2 AND S4
S16	381	S7 AND S2 AND (DIVID? OR SPLIT? OR SUBDIVID? OR DIVISION? - OR SUBDIVIS? OR BREAKUP? OR SUBGROUP?)
S17	9	S16 AND (S4 OR S6)
S18	33	S8 OR S14 OR S15 OR S17
S19	23	S18 AND IC=(G06F? OR H04L?)
S20	23	IDPAT (sorted in duplicate/non-duplicate order)
S21	23	IDPAT (primary/non-duplicate records only)
S22	1697	S2 AND (S3 OR POLL?)
S23	8	S22 AND S6
S24	6	S23 NOT S21
S25	6	IDPAT (sorted in duplicate/non-duplicate order)
S26	6	IDPAT (primary/non-duplicate records only)
S27	638	S22 AND (NETWORK? OR LAN OR LANS OR WAN OR WANS OR INTERNET? OR INTRANET?)
S28	119	S27 AND IC=(G06F-015? OR H004L-012/18)
S29	2	S28 AND S16
S30	2	S29 NOT (S26 OR S21)
S31	3306	MC=(T01-N02B OR W01-A06E1A)
S32	19	S31 AND (S16 OR S22)
S33	17	S32 NOT (S30 OR S26 OR S21)
S34	17	IDPAT (sorted in duplicate/non-duplicate order)
S35	17	IDPAT (primary/non-duplicate records only)

File 347: JAPIO Oct 1976-2003/Jun (Updated 031006)  
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File 350: Derwent WPIX 1963-2003/UD,UM &UP=200369  
(c) 2003 Thomson Derwent



21/5/1 . (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015487166 \*\*Image available\*\*  
WPI Acc No: 2003-549313/200352  
XRPX Acc No: N03-436638

**Node apparatus for wide area network, transmits identifier showing  
operating node , to notification unit which notifies operating node  
address to network management apparatus through communication link**

Patent Assignee: FUJITSU LTD (FUIT )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2003179602	A	20030627	JP 2001377450	A	20011211	200352 B

Priority Applications (No Type Date): JP 2001377450 A 20011211

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2003179602	A	14	H04L-012/26	

Abstract (Basic): JP 2003179602 A

NOVELTY - An interface unit (11) forms a link individually between adjacent nodes (10-1-10-N). A control unit (12) performs communication control based on **traffic** between interface unit and link. An **identifier** showing operating **node** is transmitted to a notification unit (15) which notifies operating **node address** in the received identifier to a network management apparatus (14) through a communication link (13).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for network management apparatus.

USE - For wide area network (WAN).

ADVANTAGE - Improves efficiency of connection process between nodes and enables provides reliable detection of failure of node.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of node apparatus. (Drawing includes non-English language text).

nodes (10-1-10-N)  
interface unit (11)  
communication controller (12)  
communication link (13)  
network management apparatus (14)  
notification unit (15)  
pp; 14 DwgNo 1/12

Title Terms: NODE; APPARATUS; WIDE; AREA; NETWORK; **TRANSMIT** ; IDENTIFY;  
OPERATE; NODE; NOTIFICATION; UNIT; NOTIFICATION; OPERATE; NODE; ADDRESS;  
NETWORK; MANAGEMENT; APPARATUS; THROUGH; COMMUNICATE; LINK

Derwent Class: T01; W01

International Patent Class (Main): **H04L-012/26**

File Segment: EPI

21/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015450746 \*\*Image available\*\*  
WPI Acc No: 2003-512888/200348  
XRPX Acc No: N03-407071

**Packet data service node selection method for wireless communication system, involves determining packet data service node communicable with protocol control function node by assigning unique identifier to each node**

Patent Assignee: HSU R T (HSUR-I); QUALCOMM INC (QUAL-N)

Inventor: HSU R T

Number of Countries: 101 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030086423	A1	20030508	US 200111954	A	20011105	200348 B
WO 200341339	A1	20030515	WO 2002US34807	A	20021029	200348

Priority Applications (No Type Date): US 200111954 A 20011105

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 20030086423	A1	17	H04L-012/28	
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WO 200341339	A1 E		H04L-012/18	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20030086423 A1

NOVELTY - The method involves determining a number for several packet data service nodes communicable with the protocol control function node, and determining packet data service nodes for a communication as a function of the determined number by assigning a unique identifier.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an infrastructure unit.

USE - Used for message **transmission** in a wireless communication system for supporting **broadcast** transmissions.

ADVANTAGE - The data packet transport reduces the bandwidth used by the infrastructure units. The number of target recipients in a **broadcast** services are considerably reduced and thereby eliminating the problems of **resource allocation** and loss of available bandwidth.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow diagram for selecting one of multiple packet data service nodes communicable with a given packet control functions.

pp; 17 DwgNo 7/7

Title Terms: PACKET; DATA; SERVICE; NODE; SELECT; METHOD; WIRELESS;

COMMUNICATE; SYSTEM; DETERMINE; PACKET; DATA; SERVICE; NODE; COMMUNICATE;

PROTOCOL; CONTROL; FUNCTION; NODE; ASSIGN; UNIQUE; IDENTIFY; NODE

Derwent Class: W01; W02

International Patent Class (Main): H04L-012/18 ; H04L-012/28

International Patent Class (Additional): H04L-012/56

File Segment: EPI

21/5/5 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014717202 \*\*Image available\*\*  
WPI Acc No: 2002-537906/200257  
XRPX Acc No: N02-425948

**Network traffic management method involves dividing target devices into subsets of target devices, based on device identifier and providing different timings for different subsets of target devices**

Patent Assignee: INTEL CORP (ITLC ); OLSEN G P (OLSE-I)

Inventor: OLSEN G P

Number of Countries: 100 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200252790	A2	20020704	WO 2001US43801	A	20011119	200257 B
US 20020129133	A1	20020912	US 2000746677	A	20001222	200262
EP 1344347	A2	20030917	EP 2001272454	A	20011119	200362
			WO 2001US43801	A	20011119	

Priority Applications (No Type Date): US 2000746677 A 20001222

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200252790 A2 E 27 H04L-012/18

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020129133 A1 G06F-015/173

EP 1344347 A2 E H04L-012/18 Based on patent WO 200252790

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic): WO 200252790 A2

NOVELTY - The target devices (130,132,138) to which the messages are to be transmitted, are **divided** into several subsets of target devices, based on their identifier. The timing for transmitting the message to the subsets of the target devices, is varied.

USE - For managing traffic in network to which electronic systems such as computer systems, set-top boxes, personal digital assistants, etc., are connected.

ADVANTAGE - Co-ordination and management of the exclusion list are avoided, since the messages are transmitted to the target device at different time periods.

DESCRIPTION OF DRAWING(S) - The figure shows the diagram explaining the process where one electronic device **broadcasts** messages to other devices connected to the network.

Target devices (130,132,138)

pp; 27 DwgNo 1/4

Title Terms: NETWORK; TRAFFIC; MANAGEMENT; METHOD; **DIVIDE** ; TARGET; DEVICE ; SUBSET; TARGET; DEVICE; BASED; DEVICE; IDENTIFY; TIME; SUBSET; TARGET; DEVICE

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/173 ; H04L-012/18

File Segment: EPI

21/5/6 (Item 6 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014358339 \*\*Image available\*\*  
WPI Acc No: 2002-179040/200223  
Related WPI Acc No: 2002-017653  
XRPX Acc No: N02-136166

**Stored information retrieving and processing method in Internet, involves transmitting address data selected based on characteristic of remote computer, to remote computer from central computer**

Patent Assignee: BERTOLUS P A (BERT-I); LEWIS T G (LEWI-I)

Inventor: BERTOLUS P A; LEWIS T G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020007394	A1	20020117	US 2000551583	A	20000418	200223 B
			US 2001836864	A	20010418	

Priority Applications (No Type Date): US 2001836864 A 20010418; US 2000551583 A 20000418

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020007394	A1	13	G06F-015/16	CIP of application US 2000551583

Abstract (Basic): US 20020007394 A1

NOVELTY - A message is sent from a remote computer to a central computer (10) in a network, for identification of the remote computers (200,202). Depending on the characteristics of the remote **computer**, **address** data is selected by the central computer and transmitted to the remote computer. The information corresponding to the address data is processed and stored in a predetermined storage location.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Remote computer;
- (b) Stored information retrieving and processing system;
- (c) Recorded medium storing stored information retrieving and processing program

USE - For computer system for retrieving and processing stored information on communication network such as Internet.

ADVANTAGE - Efficiency of **resource allocation** is maximum. Communication cost is minimized by allocating address data with respect to the remote computer characteristic. Reduction in bandwidth use between the ISP web server and the central computer is achieved, because the central computer does not need to continually spider the contents of the ISP web server.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic diagram explaining the process of the retrieving and processing stored information.

Central computer (10)  
Remote computers (200,202)  
pp; 13 DwgNo 3/4

Title Terms: STORAGE; INFORMATION; RETRIEVAL; PROCESS; METHOD; **TRANSMIT** ; ADDRESS; DATA; SELECT; BASED; CHARACTERISTIC; REMOTE; COMPUTER; REMOTE; COMPUTER; CENTRAL; COMPUTER

Derwent Class: T01

International Patent Class (Main): G06F-015/16

File Segment: EPI

21/5/8 (Item 8 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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011933413 \*\*Image available\*\*  
WPI Acc No: 1998-350323/199831  
XRPX Acc No: N98-273503

**Electric power supply management system e.g. for communication via electric power lines - has central unit which polls all known remote nodes and polled remote nodes replies with message and new remote node hears polling command from central unit and transmits Burst Log On Message direct to central unit**

Patent Assignee: POWERCOM CONTROL SYSTEMS LTD (POWE-N)

Inventor: LIEBELMAN I; LIBERMAN I

Number of Countries: 026 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 852419	A2	19980708	EP 97121370	A	19971204	199831 B
CA 2223316	A	19980604	CA 2223316	A	19971203	199839
US 6151330	A	20001121	US 97984997	A	19971204	200101

Priority Applications (No Type Date): IL 119753 A 19961204

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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EP 852419	A2	E 13	H02J-013/00	
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Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI  
LT LU LV MC MK NL PT RO SE SI

CA 2223316	A	H04L-029/02
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US 6151330	A	H04L-012/403
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Abstract (Basic): EP 852419 A

The system maps remote nodes (RN) performed by a central unit (CU) which operates in both modes of polling and burst. Initially all nodes (RN) are in a New/Lost mode and there are no known nodes in the central unit data base, so that the central unit starts a polling cycle by sending a polling message to an imaginary node, with a reserved **node ID**. The polling message contains a time for the bursts start and a number of available time slots. Each remote node (RN) which receives the message, stores the central unit as its neighbour, enters into a known mode and waits for a time to **transmit** a Log-on Burst Message, where time for burst is computed by a New/Lost mode of each node (RN). The central unit enters the burst mode and waits to receive a reply message, it records the replying node (RN) in the data base as one that has a direct connection with the central unit.

When the burst mode is finished, the central unit computes new parameters for the burst mode including start time and a number of slots and re-enters the polling mode, upon which it performs its first real interrogation cycle, transmitting polling messages to all the nodes in its data base, at this stage all the nodes are with direct connection, without relays in the route. The New/Lost mode of each node (RN) which receives the polling message stores again the central unit as its neighbour, while each New/Lost node which did not get this message but receives the polling reply from another node (RN) stores the last heard node as its neighbour.

**ADVANTAGE** - Allows automatic network mapping and adaptive routing, for automatic log-on of remote nodes and optimisation of communication routes and **control** of **traffic** volume.

Dwg.2/4

Title Terms: ELECTRIC; POWER; SUPPLY; MANAGEMENT; SYSTEM; COMMUNICATE;  
ELECTRIC; POWER; LINE; CENTRAL; UNIT; POLL; REMOTE; NODE; POLL; REMOTE;  
NODE; REPLY; MESSAGE; NEW; REMOTE; NODE; POLL; COMMAND; CENTRAL; UNIT;  
**TRANSMIT** ; BURST; LOG; MESSAGE; DIRECT; CENTRAL; UNIT

Derwent Class: W01; X12

International Patent Class (Main): H02J-013/00; **H04L-012/403** ;  
**H04L-029/02**

International Patent Class (Additional): G01R-011/00; G01R-022/00;  
G08C-019/00; H04B-003/54; H04B-003/58

File Segment: EPI

26/5/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012103737 \*\*Image available\*\*  
WPI Acc No: 1998-520649/199844  
Related WPI Acc No: 1997-402149; 1998-286296; 1998-436873; 1998-456613;  
1998-556912; 2000-104997; 2002-153850; 2003-418550  
XRPX Acc No: N98-406662

**System resource configuration method - involves detecting device ,  
assigning ID code, obtaining configuration data for each device  
connected to selected bus, identifying drivers, enabling communication,  
and allocating resources for each system bus**  
Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: ENSTROM M R; LENNON T E; LICHTMAN M; LIPE R A; SANTERRE P; SHORT  
R T; VOTH D W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5809329	A	19980915	US 94250698	A	19940527	199844 B
			US 95480764	A	19950607	

Priority Applications (No Type Date): US 94250698 A 19940527; US 95480764 A  
19950607

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5809329	A	41	G06F-013/22	Div ex application US 94250698

Abstract (Basic): US 5809329 A

The method involves detecting a particular device (20) connected to a selected system bus (18), assigning a unique identification code to the device, and obtaining logical configuration data for the device. This is repeated for each remaining device connected to the selected bus.

A device driver (156) is identified in **response** to a corresponding identification code, and enables communications between the corresponding device and computer system. **Resources** , are **allocated** in **response** to the identification code and the logical configuration data associated with the devices, to prevent conflicting use of resources by the devices. The device drivers are loaded in **response** to **resource allocation** . The entire method is repeated for each remaining system bus.

ADVANTAGE - Provides easy installation and configuration of self-identifying devices. Supports variety of bus architectures.

Dwg.6/13

Title Terms: SYSTEM; RESOURCE; CONFIGURATION; METHOD; DETECT; DEVICE;  
ASSIGN; ID; CODE; OBTAIN; CONFIGURATION; DATA; DEVICE; CONNECT; SELECT;  
BUS; IDENTIFY; DRIVE; ENABLE; COMMUNICATE; ALLOCATE; RESOURCE; SYSTEM;  
BUS

Derwent Class: T01

International Patent Class (Main): G06F-013/22

International Patent Class (Additional): G06F-015/40

File Segment: EPI

30/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014088358 \*\*Image available\*\*

WPI Acc No: 2001-572572/200165

XRPX Acc No: N01-426823

**Data transmission management apparatus for data transmission system has alternative transmission condition information creation unit which forms alternative transmission condition and controls network**

Patent Assignee: SONY CORP (SONY ); HASEGAWA J (HASE-I); JINUSHI K (JINU-I); KOKUBUN K (KOKU-I)

Inventor: HASEGAWA J; JINUSHI K; KOKUBUN K

Number of Countries: 028 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1126659	A2	20010822	EP 2001103480	A	20010214	200165 B
US 20010025308	A1	20010927	US 2001789356	A	20010220	200165
JP 2001237828	A	20010831	JP 200046842	A	20000218	200165

Priority Applications (No Type Date): JP 200046842 A 20000218

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing	Notes
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EP 1126659	A2	E	39	H04L-012/24		
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI TR

US 20010025308	A1		G06F-015/16
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JP 2001237828	A	22	H04L-012/14
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Abstract (Basic): EP 1126659 A2

NOVELTY - A communication **network** (3) connects a data transmitter (2) to a data receiver (4). An alternative **transmission** condition information creation unit forms an alternative **transmission** condition indicating condition for allowing data transmitter to send data to the data receiver, and controls the **network** in order to send alternative **transmission** condition information to the data transmitter.

DETAILED DESCRIPTION - The data receiver receives data sent from the data transmitter via a communication line. A memory stores a band management table describing band availability identification information based on relationship between a **split** band obtained by **dividing** data communication band and a band **transmission** time interval for each **split** band via the communication line and **resource management** information indicating the states of the data transmitter and the data receiver. The alternative **transmission** condition information creation unit forms the alternative **transmission** condition information with reference to the band **management** table and **resource management** information, based on a **transmission** condition request received by the **network** from the data transmitter via the communication line. INDEPENDENT CLAIMS are also included for the following:

(a) a data **transmission** management method;

(b) and a data **transmission** system.

USE - For data **transmission** system.

ADVANTAGE - Manages data **transmission** in **response** to request from data transmitter when data transmitter sends data to the data receiver via communication line. Provides alternative to a **transmission** condition for data **transmission** according to condition requested from data transmitter.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the data **transmission** system in which the data **transmission** management apparatus is used.

Data transmitter (2)

Communication **network** (3)

Data receiver (4)

pp; 39 DwgNo 1/23

Title Terms: DATA; **TRANSMISSION** ; MANAGEMENT; APPARATUS; DATA;

**TRANSMISSION** ; SYSTEM; ALTERNATIVE; **TRANSMISSION** ; CONDITION;

INFORMATION; CREATION; UNIT; FORM; ALTERNATIVE; **TRANSMISSION** ; CONDITION  
; CONTROL; **NETWORK**  
Derwent Class: P85; W01  
International Patent Class (Main): **G06F-015/16** ; H04L-012/14; H04L-012/24  
International Patent Class (Additional): G09G-005/00; H04L-012/56;  
H04N-007/16  
File Segment: EPI; EngPI



35/5/11 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012914673 \*\*Image available\*\*  
WPI Acc No: 2000-086509/200007  
XRPX Acc No: N00-067912

**Back pressure responsive multicasting queue for controlling cell traffic in ATM network**

Patent Assignee: 3COM CORP (THRE-N)  
Inventor: LAHAT A  
Number of Countries: 086 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9959305	A1	19991118	WO 99US7877	A	19990408	200007 B
AU 9934887	A	19991129	AU 9934887	A	19990408	200018
US 6201792	B1	20010313	US 9879003	A	19980514	200120

Priority Applications (No Type Date): US 9879003 A 19980514

**Patent Details:**

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9959305 A1 E 23 H04L-012/56

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN  
CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 9934887 A H04L-012/56 Based on patent WO 9959305

US 6201792 B1 G06F-011/00

**Abstract (Basic): WO 9959305 A1**

NOVELTY - A modified multicast register has bits which are generated by XORing corresponding bits of multi-tag register and back pressure information register. Each bit of modified multi-tag register associated with one of output ports (B-F), indicates whether corresponding output port receive copy of cells output from multicast queue (100).

DETAILED DESCRIPTION - Several output queues are associated with output port which generates back pressure signal (111) when its associated output queue becomes full. A multicast tag register has bits each associated with one of output ports. Each bit in multicast register indicates membership in multicast group. Each output port in multicast group receives copy of each cell output from multicast queue. A back pressure information register have bits in which each bit associated with one of output ports, indicates whether corresponding output port is full.

USE - For **controlling cell traffic** in ATM network for video transmission over UDP transport layer, voice over ATM sensitive application utilizing UDP over IP.

ADVANTAGE - Identifies one or more destinations sending back pressure signal in **response** to which one or more destinations are removed from distribution list in correction tag field, thus the destination queues are not congested. Applications associated with congested queues are able to handle cell loss since cell traffic will cease only to destination queues that generate back pressure signal indicating that they are full.

DESCRIPTION OF DRAWING(S) - The figure represents diagrams illustrating cell transmission from multicast queue to output queues.

Multicast queue (100)

Back pressure signal (111)

output queues (B-F)

pp; 23 DwgNo 7/7

Title Terms: BACK; PRESSURE; RESPOND; QUEUE; CONTROL; CELL; TRAFFIC; ATM; NETWORK

Derwent Class: W01; W02

International Patent Class (Main): G06F-011/00; H04L-012/56

International Patent Class (Additional): H04Q-011/04

File Segment: EPI

35/5/12 . (Item 12 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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012914560 \*\*Image available\*\*  
WPI Acc No: 2000-086396/200007  
XRPX Acc No: N00-067821

**Contents providing apparatus**

Patent Assignee: JISEDAI JOHO HOSO SYSTEM KENYUJO KK (JISE-N); SONY CORP  
(SONY ); INFORMATION BROADCASTING LAB INC (INFO-N)

Inventor: GONNO Y; HARAOKA K; NISHIO F; YAMAGISHI Y

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9956438	A1	19991104	WO 99JP2187	A	19990423	200007 B
JP 2000010895	A	20000114	JP 99108825	A	19990416	200014
JP 3285841	B2	20020527	JP 99108825	A	19990416	200241

Priority Applications (No Type Date): JP 99108825 A 19990416; JP 98114798 A  
19980424

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9956438	A1	J	90	H04L-012/58	
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Designated States (National): CA US

JP 2000010895	A	28	G06F-013/00	
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JP 3285841	B2	28	H04L-012/18	Previous Publ. patent JP 2000010895
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Abstract (Basic): WO 9956438 A1

NOVELTY - A server (2) produces subjects to update objects registered in a database (3) and produces events to acquire the subjects. The server also receives requests from a receiving terminal (5), sums up the requests, and **allocates resources** required to provide subjects based on the sum. The server transmits the event, and provides subjects based on the **allocated resource**. A receiving terminal receives the events, evaluates the need of the subjects acquired based on events, and transmits requests for the subjects to the server according to the evaluation. In **response** to the events, the subjects corresponding to the requests are supplied to the receiving terminal from the server.

USE - For providing contents

DESCRIPTION OF DRAWING(S) - The figure shows a diagram of the apparatus.

server (2)

database (3)

receiving terminal (5)

pp; 90 DwgNo 1/17

Title Terms: CONTENT; APPARATUS

Derwent Class: T01; W01; W02

International Patent Class (Main): G06F-013/00; H04L-012/18; H04L-012/58

International Patent Class (Additional): G06F-015/177; G06F-017/30;

H04L-012/54; H04L-012/56; H04N-007/16

File Segment: EPI

5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012585430 \*\*Image available\*\*

WPI Acc No: 1999-391537/199933

XRPX Acc No: N99-293927

Traffic allocation processing for performing simultaneous broadcast delivery which is directed to different addresses - involves adding number of existing pages and number of novel pages to obtain number of delivery addresses which are equally allocated to all storage type communication apparatus

Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11154946	A	19990608	JP 97319868	A	19971120	199933 B
JP 3199314	B2	20010820	JP 97319868	A	19971120	200149

Priority Applications (No Type Date): JP 97319868 A 19971120

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11154946	A		7	H04L-012/18	
JP 3199314	B2		7	H04L-012/18	Previous Publ. patent JP 11154946

Abstract (Basic): JP 11154946 A

NOVELTY - The number of existing pages and the number of novel pages are added to obtain the number of delivery addresses which are equally allocated to all the storage type communication apparatus. The allocation of the delivery addresses is performed in **response** to a simultaneous broadcast call. The existing pages and novel pages are stored in the storage type communication apparatus.

USE - For performing simultaneous broadcast delivery which is directed to different addresses.

ADVANTAGE - Reduces the deviation of the delivery completion time of all addresses since the load of the storage type communication apparatuses are equalized. DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the operation of the **traffic allocation** processing.

Dwg.3/6

Title Terms: TRAFFIC; ALLOCATE; PROCESS; PERFORMANCE; SIMULTANEOUS; BROADCAST; DELIVER; DIRECT; ADDRESS; ADD; NUMBER; EXIST; PAGE; NUMBER; NOVEL; PAGE; OBTAIN; NUMBER; DELIVER; ADDRESS; EQUAL; ALLOCATE; STORAGE; TYPE; COMMUNICATE; APPARATUS

Derwent Class: W01; W02

International Patent Class (Main): H04L-012/18

International Patent Class (Additional): H04L-012/54; H04L-012/58;

H04N-001/00

File Segment: EPI

35/5/17 (Item 17 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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011714084 \*\*Image available\*\*  
WPI Acc No: 1998-130994/199812  
XRPX Acc No: N98-103354

**High speed Internet access system and network management system -  
allocates bandwidth to requesting devices according to bandwidth  
utilisation by other devices, demand of request device and class or grade  
of service**

Patent Assignee: HYBRID NETWORKS INC (HYBR-N)  
Number of Countries: 076 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9805144	A1	19980205	WO 97US12935	A	19970724	199812 B
AU 9742293	A	19980220	AU 9742293	A	19970724	199828
CN 1242896	A	20000126	CN 97198235	A	19970724	200024

Priority Applications (No Type Date): US 9622644 P 19960725  
Cited Patents: No-SR.Pub  
Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9805144	A1	E	80 H04L-012/16	

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU  
CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US  
UZ VN

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT  
KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9742293	A	Based on patent WO 9805144
CN 1242896	A	H04L-012/16

Abstract (Basic): WO 9805144 A

The two-way asymmetric communication system has scalable upstream and downstream paths that enable remote data processor unit to communicate with a server. The system has a common routing/switching backplane for providing intercommunication services among multiple communication devices including the server. An independent upstream controller communicates with the backplane operating in accordance with an upstream protocol for receiving information packets from the remote processor devices. The upstream controller includes network operating algorithms for analysing **response** packets transmitted by the downstream controller to determine the operational status of an identified remote data processor device.

An independent downstream controller communicates with the backplane for transmitting data packets to the remote data processor units in accordance with a downstream protocol. The independent downstream controller transmits control packets directed to an identified remote data processor that instructs the device to respond with predetermined information in accordance with the control packet. A network manager is in communication with the independent upstream and downstream controllers through the backplane for managing the two-way communications between the remote data processor devices and the server.

USE - For controlling data flow in asymmetric network in which users share common broadband medium. Manages configuration of remote devices.

ADVANTAGE - Provides thorough packet-based control flexibility in assigning configuration parameters and bandwidth utilisation by providing downloadable network operating software from network management centre to remote devices. Permits independent scalability of upstream and downstream capacity separately.

Dwg.1/5

Title Terms: HIGH; SPEED; ACCESS; SYSTEM; NETWORK; MANAGEMENT; SYSTEM;  
ALLOCATE; BANDWIDTH; REQUEST; DEVICE; ACCORD; BANDWIDTH; UTILISE; DEVICE;  
DEMAND; REQUEST; DEVICE; CLASS; GRADE; SERVICE  
Derwent Class: W01; W02

International Patent Class (Main): H04L-012/16  
File Segment: EPI

L Number	Hits	Search Text	DB	Time stamp
1	87	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same broadcast	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:43
2	85	709/224.ccls. and (VLAN or virtual adj LAN or group\$4) same broadcast	USPAT; US-PGPUB; IBM_TDB	2003/10/30 10:51
6	31	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same broadcast and schedul\$4	USPAT; US-PGPUB; IBM_TDB	2003/10/30 10:52
3	1	709/224.ccls. and (VLAN or virtual adj LAN or group\$4) same broadcast same schedul\$4	USPAT; US-PGPUB; IBM_TDB	2003/10/30 10:52
5	1	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same broadcast same schedul\$4	USPAT; US-PGPUB; IBM_TDB	2003/10/30 10:52
4	33	709/224.ccls. and (VLAN or virtual adj LAN or group\$4) same broadcast and schedul\$4	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:42
8	306	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same (group or subgroup or subset or subdivid\$4) and broadcast	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:44
9	73	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same (group or subgroup or subset or subdivid\$4) same broadcast	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:56
10	27	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same (group or subgroup or subset or subdivid\$4) same broadcast and schedul\$4	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:44
7	10	709/224.ccls. and (VLAN or virtual adj LAN or group\$4) same (divid\$4 or split\$4) same (group or subgroup or subset or subdivid\$4) and broadcast and schedul\$4	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:54
11	5	709/223.ccls. and (VLAN or virtual adj LAN or group\$4) same (group or subgroup or subset or subdivid\$4) same broadcast.ab.	USPAT; US-PGPUB; IBM_TDB	2003/10/30 11:56